OPTICAL RING NETWORK WITH OPTICAL SUBNETS AND METHOD

5 ABSTRACT

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In one embodiment, a method of passively adding traffic from a first optical network to a second optical network includes receiving ingress traffic from an optical ring of the first network at a node coupled to the first network, generating a first and second copy of the traffic, passively forwarding the first and second copies of the traffic, splitting the second copy of the traffic into multiple substantially identical copies, and filtering at least one of the copies of the second copy of the traffic into one or more constituent wavelengths. The method further includes selectively forwarding the signal in one or more constituent wavelengths of the second copy of the traffic to a node coupled to the second network, receiving the forwarded signal in one or more wavelengths at the node, and adding the forwarded signal in one or more wavelengths to an optical ring of the second network.